

**REPORT AND RECOMMENDATIONS  
YOUTH HEALTH TASK FORCE  
OF THE  
MISSOURI RURAL HEALTH COALITION  
INITIATIVE**

**Presented to  
The Missouri Office of Rural Health Advisory Commission**

## Introduction

Childhood and adolescence are critical times for healthy human development. The vulnerability of youth places them at special risk for preventable problems including unintentional injuries, homicide, abuse and neglect, and environmental hazards such as air pollution and water contamination. Attitudes and behaviors developed during these early years related to diet, exercise, consequences that continue across their life span. In addition, without adequate adult nurturing, guidance, and supervision, youth are at risk of developmental problems which can also affect them throughout their lives.

## Health-Related Needs of Youth

The Youth Health Task Force has defined the health-related needs of youth to include age appropriate education and prevention programs, early identification and screening services and access to needed mental health and medical care. This report will focus specifically on the health-related concerns and needs of youth ages 6 through 21. Based on 1990 census data, youth comprise 23% of Missouri's population—663,853 children ages 6 to 14 and 512,386 adolescents ages 15 to 21. The majority of youth live in the counties surrounding Kansas City and St. Louis and in a strip of counties from Columbia down through Branson.

The health profile of Missouri's youth has changed significantly during the 1900's. Threats from infectious diseases such as polio, diphtheria, pneumonia, measles, and whooping cough have nearly disappeared. Legislation requiring proof of current immunization for children attending child care programs and schools have contributed to this decreased threat among older children. Nevertheless, many children under the age of three have not been adequately immunized and continue to be at risk.

Replacing infectious diseases as a cause of mortality and morbidity among youth are a range of other preventable problems—injuries, homicides, substance abuse, adolescent pregnancy, etc. Added to this list are mental health issues. An estimated 12% of Missouri's students could benefit from temporary mental health services to help them cope with crisis, stress overload, or developmental concerns. Such services are not readily available in schools or rural communities. The increase in substance use and other inappropriate risk-taking behaviors, the growing number of youth suffering from depression, and the increase in suicide and suicide attempts among youth are indicators that many young people need on-going and intensive mental health care.

The Missouri Department of Health has developed a ranking of health problems for children over the age of one. It is important to emphasize that rural children face additional hazards not faced by their urban counterparts. Many families working in agriculture live in the work place. Children are often exposed to safety and health hazards as non-working bystanders and as helpers at an early age. All too often rural youth are carrying out jobs not suited for their developmental level or age and without the training or safety equipment needed to safely do the job. As a result several thousand children nationally face disabling injury and even death in the farm workplace. Following is the list of health problems of greatest concern for school-age children and adolescents.

## Injuries/Deaths

*In 1990, 75% (411) of the 551 deaths of youth ages 5-19 resulted from unintentional and intentional injury.*

*Motor vehicles accounted for more than 50% of injury deaths. Youths in urban areas*

*are more likely to be injured in motor vehicle incidences, while rural youth are more likely to die as a result of such an incidence.*

*Homicide and suicide claimed the lives of 111 Missouri youth ages 5-19 in 1990, accounting for 28% of related injury and related deaths.*

*In 1990, an estimated 4,469 youth between the ages of 5-14 and 8,661 adolescents and young adults in the 15-24 age group were hospitalized due to injury.*

*Approximately 11 adolescents and young adults between the ages of 15 and 24 died as a result of agricultural related incidence in 1990. Adequate data on the number of youth killed or injured as the result of farm work related injuries does not exist.*

### **Communicable, vaccine, and preventable disease (including oral health, sexually transmitted diseases, adequate immunizations).**

*In 1990, there were 20,012 reported cases of gonorrhea in Missouri; 33.5% of these cases occurred among youth between the ages of 10-19. (Approximately 11% of the total reported cases for all age groups occurred outside the metropolitan areas.)*

*Of the reported HIV cases in Missouri, 207 involved youth below the age of 19. In addition, 36.8% of all reported cases among young adults ages 20-29, many of which in all probability came into contact with the virus as adolescents.*

*Of reported AIDS cases, 56 involve youth below the age of 19; 25% of all reported AIDS cases are to young adults between the ages of 20-29. Twenty percent of all reported cases involved residents living in rural areas.*

### **Substance Abuse (tobacco, alcohol, and other drugs)**

*A 1991 school-based survey indicated that tobacco and alcohol remained the drugs of choice for Missouri students, 55% of seniors reported having used alcohol during the 30-day period prior to the study and 30% reported smoking.*

*In rural areas, 20% of the seniors reported using smokeless tobacco, a known risk factor for cancer, in the month prior to the study. This compares to 14% for urban youth.<sup>9</sup>*

*During 1991, there was a general drop in the use of most illegal drugs, nevertheless, 3% of male seniors reported moderate to high use of amphetamines and stay-awake pills.<sup>9</sup>*

*A 1988 school-based survey indicated that in Missouri, by the 3rd grade, 16% had tried alcohol and/or cigarettes.*

### **Unintentional adolescent pregnancy**

*There were 33,664 births to Missouri adolescents between 1985 and 1989, 70% of these births occurred to adolescents who were not married and 41% occurred to teens living in rural areas.*

*There were an additional 8,246 births to Missouri adolescents under the age of 18 in 1990 and 1991.*

*Women who have children while in their teens are less likely to finish high school or college and more likely to be unemployed.*

### **Health problems due to dietary inadequacies (iron deficiency anemia, obesity) and lack of fitness**

*Over one-third of 7th and 12 grade females perceive themselves to be overweight.*

*It is estimated that 34% of 10-17 years olds are not participating in physical activities that improves heart health.<sup>14</sup>*

*The rate of obesity in children ages 6-11 has increased 54% since the 1960s, while the rate in adolescents ages 12-17 has increased 39%.<sup>14</sup>*

*Fifty-five percent of the public schools are currently participating in the school breakfast program. Increased academic performance, improved classroom attentiveness and reduced tardiness and absenteeism are cited benefits of such programs.<sup>13</sup>*

### **Environmental Hazards (contaminated water, air pollution, lead, personal safety, etc.)**

*Over 40% of private water sources statewide are currently contaminated.<sup>16</sup>*

*Approximately 25% of Missourians smoke. Children of smokers are known to have higher rates of chronic respiratory illnesses.*

*While the use of lead-free gasoline has helped to reduce the amount of lead carried in the blood stream of the general U.S. population, lead poisoning continues to be a preventable health concern in children.*

### **Chronic (diabetes, arthritis, cancer, heart disease, etc.)**

*Cancer is the leading illness related cause of death for Missouri children between the ages of 5-14 and for adolescents and young adults between 15-24 years of age.*

*It is estimated that at least one-third of Missouri youth have at least one behavioral risk factor—smoking, high fat diets, or physical inactivity—for heart disease which is the country's leading cause of death for males and females.*

*A health screening of 210 sixth graders in one Missouri county found that 18% of those screened had elevated blood cholesterol levels.*

### **Maintaining the Health of Our Youth**

Children do not grow up in isolation, but in ever-expanding environments. Influenced first and foremost by their family, youth are also impacted by their peers, their school and work settings, the media (especially television), and by the community in which they live. Community as well as family factors have the potential to positively or negatively impact health outcomes in youth. Improving and maintaining youths' health status requires strengthening the protective factors while decreasing the negative ones. It also requires addressing risk factors at multiple levels. Finding solutions to such problems as lack of insurance and poverty will require cooperation and collaboration between public and private service pro-

viders, business and industry, and government at all levels. (An estimated 17% of Missouri's children are without health insurance and 17.4% of our children live in poverty.)

Preventing health problems among our youth is a sound investment in the future. Prevention should be a primary objective of any youth-related program. Our youth can be our greatest resource or our greatest burden. The choice is ours. To be and remain healthy, youth need:

**Comprehensive Health Instruction:** The ability to make responsible decisions is not a function of age alone, rather it is based on attaining accurate information, knowledge, skills, and appropriate attitudes. The goal of education is to teach youth how their bodies and minds develop and work, what strengthens them and what harms them. Included in such health education efforts should be life skills training with special attention to decision-making, self-responsibility and conflict resolution. Emphasis must be placed on educating young males as well as females. The need for health education does not end at the school room door. Special attention should be paid to teaching work site (including farm) safety to young workers. In addition, positive support for healthy behavior should be encouraged by the media which can provide positive messages about proper nutrition and exercise, responsible behavior, and positive conflict resolution.

**Access to Health Services:** Affordability and availability are keys to providing access. Insurance coverage—private or public—must be extended to any youth. Such coverage should include preventive health care to forestall future problems. Availability could be improved by providing school-linked services involving cooperation among education, health, social service agencies, and parents and youth. To be successful, the youth directly impacted by such services and their parents must be actively involved in all aspects of program decision-making.

**Motivation and Support from Adults:** Youth need close and continuing contact with caring adults to whom they can take their problems and in whose judgments they have confidence. Parents are the primary health educators of their children.

Parents need accurate information as well as assistance with learning effective communication skills in order to provide appropriate guidance to their children. Equally important is on-going contact with adults who can provide youth with opportunities to be useful and feel competent. Youth must be shown that there are meaningful opportunities for work and involvement in the community. There are many ways to accomplish this goal through youth organizations, volunteer opportunities, mentoring programs, and internships in work settings. All of these require the cooperation of community, government and business leaders.

**An Improved Environment:** In order to survive, we need adequate air, water, food and shelter. Health is adversely affected, when individuals are deprived of any of these essential environmental factors, or if these factors are impure or toxic. Optimizing health means keeping the quality of the environment that is free of drugs, crime, violence, constant noise and stress. They need an opportunity to breathe unpolluted air and drink water that is not contaminated by chemicals. Youth tend not to think about the long-term consequences of their behavior, encouraging them to do so may become nearly impossible if they are faced daily with environmental threats such as pollution and violence.

## **Barriers to Maintaining Health**

Barriers to adequate health education and care for youth exist throughout Missouri. Such services are even less accessible to youth in most rural areas of our state.

### **Barrier #1: Existence of Poverty**

Twenty-three percent of rural children live in poverty. Low family incomes, the increase in single-parent families in rural areas, and homelessness are contributing factors. The majority of rural counties in Missouri have 20% or more of the households with an annual income of \$10,000 or less. One in three Missouri children will live in a single-parent family at some point before they reach the age of 18 and the number of single-parent families in rural Missouri increased between 1980 and 1990. In 1990, 28% of the children in Missouri homeless shelters were located in areas outside St. Louis, Kansas City, and Springfield. This group of youth are especially vulnerable because they have less access to consistent education and routine health care.

Failure to prevent childhood poverty and address the economic needs of families increases not only the level of homelessness but also leads to physical and social morbidities. Teenage pregnancy, unhealthy babies, and school dropout rates greater than 20% exist in a number of rural counties especially in the central and southeast parts of the state. Missouri teens account for 35% of all non-marital births in Missouri. Other problems associated with poverty are increased crime and delinquency, an increase in stress-induced substance abuse, mental illness, child abuse and neglect and lower productivity in the labor market. Intentional violence: Approximately 12 out of every 1,000 Missouri children are the victim of substantiated abuse and neglect. Rural counties are among the counties with some of the highest rates of child abuse per 1,000 population. Such problems impose enormous costs on Missourians including significant increases in funding for treatment of chronic diseases and disabilities, special education programs, foster care, prison, and welfare services.

### **Barrier #2: The lack of an effective health care system for under-served populations which includes much of rural Missouri.**

Particularly in rural areas, access to health-related education and care are affected by a range of complex and interacting factors. Specific factors include:

The inability of many Missouri rural youth and their families to access adequate health insurance. Children of working parents are the fastest growing group of uninsured in this country. In Missouri, 87% of businesses in the private sector are classified as small business (having less than 25 employees). Employees in companies of this size are half as likely to have health insurance for themselves or their families as employees of companies with 100 or more employees. Many of these small businesses are located in rural areas.

Fifty Missouri counties, or parts of counties, have been designated as Manpower Shortage Areas and have an insufficient number of health care providers to meet the needs of the population. Thus, even when a family can pay for health services, such care may not be available without traveling long distances. The problem is compounded by the rapid increase in two-wage earner and single-parent families and by the increasing number of rural individuals who have to commute outside their home county in order to work. Based on 1990 census data, 55% or more of women in almost every county in Missouri work outside the home. In addition, 26% of Missouri workers are commuting outside their home counties to work. As a result, parents are not always available to get children to care when it is needed.

Health services needed by youth are not always available through the local health departments. Contributing factors include budgets that are insufficient to provide all needed services, age limitations on some services, and the inability to recruit and retain professional staff because competitive salaries and benefits cannot be offered. In some cases, the lack of sufficient incomes to purchase needed care is another barrier for youth.

Limited acceptance and expansion of family nurse practitioner programs in Missouri also contribute to the shortage of needed care. This problem, in large part, is due to a lack of cooperation and communication between groups responsible for the licensing of health professionals.

A fragmented system of health-related programming for Missouri rural youth and their families exists. This fragmentation does not allow for effective funding, communication, coordination of services, or collaboration of efforts. As a result, there is a lack of community-based family support networks that can offer referrals and access to a broad range of services including physical and mental health care, health promotion, education, recreation, housing, parenting education and support, employment and training opportunities, and substance abuse prevention and treatment.

In rural Missouri, services are less accessible for youth with time and distance posing considerable barriers. Lack of transportation contributes to the problem. Many rural youth rely on school transportation services to get them between home and school. Rarely do these bus schedules permit participation in after-school sports or club activities that would bring youth into contact with caring adults and positive role models. Nor do these schedules provide youth time to make use of health care that does exist. While rural Missouri has a transportation system, the system is not accessible to all residents in a working community. Underscored populations are the working poor and youth. If you are 16 years old and not eligible for an existing program that includes transportation, you are not likely to have access to transportation on a routine basis. As a result, youth in need of health care have few opportunities to receive such care, even when it does exist in a community.

The lack of nurses in rural schools contributes to the problem as well. Less than 50% of Missouri schools provide nursing services, which means that more than 90,000 children are without the services of a school nurse. As a result, developmental delays may go unrecognized, children with chronic health problems may not have assistance in managing those problems, and qualified medical care may not be available in an emergency. The problem tends to be worse in rural areas.

Lack of inter-agency and intra-agency communication, coordination of services and collaboration (fiscal and other) among community health programs at the state agency level compounds problems at the local level.

Lack of communication and coordination between traditional public community health programs and health-related services offered through the schools and private health care providers is an additional barrier. For example, local physicians and school health personnel (speech therapists/occupational therapists) may be unaware of the changes in the Healthy Children and Youth Program (EPSDT). These health professionals could become Medicaid providers and thus improve access to medical screening, diagnosis and treatment for Medicaid-eligible children living in rural areas.

In small rural communities, the presence of neighbors, friends, and parents who either work in or receive services from existing health service providers poses a threat to confidentiality for sensitive health-related issues of young people.

**Barrier #3: Lack of education or sensitivity to the health-related issues and developmental concerns of rural Missouri youth among decision-makers, health-care providers and parents.**

**Barrier #4: Lack of adequate funding for rural Missouri schools.**

Comprehensive school health programs provide communities a vehicle for improving youth's access to a range of services by creating a system which encourages partnerships between community resources available to youth and their families. However, many rural schools are in a survival mode. They don't have the resources to meet the rigorous academic standards required of their students, much less foster initiative, innovation, and creativity among their teachers and staff. As a result, there are few comprehensive school health education programs in rural Missouri.

Yet how can they afford not to provide such programs? It is through an effective safety and substance abuse education program that many of the 75% fatal motor vehicle incidence which occur in rural Missouri could be prevented. It is through effective family life and parenting education that many teen pregnancies could be prevented and the incidence of child abuse and neglect in rural Missouri decreased. It is through the provision of counseling services that the mental health status of youth could be improved. It is through the provision of school nurses and school-linked health services that youth can gain access to care in an emergency and assistance with managing chronic illnesses. And, it is through such programs that youth have access to early screening and identification services which could prevent serious health complications and decrease medical expenses for parents.

**Barrier #5: Lack of "prevention" mode of thinking**

Decision-making in the health care system all too often focuses on delaying death rather than on promoting health and preventing disease. Although this barrier is not limited to rural Missouri, it presents a greater impact on the health of rural Missouri youth and their families due to the already limited health "treatment" resources available.

**Barrier #6: Lack of positive role models**

Confusing and inconsistent attitudes and social norms existing in rural Missouri provide youth with mixed messages about what is expected of them. For example, adults in some rural communities unwittingly condone teenage drinking and teens' use of cigarettes and chewing tobacco. How many times do we hear, "Kids will be kids," "I did it, so will they." We send similar confusing messages about sexual behavior. Parents and community leaders must promote healthful lifestyles through their own behaviors and help children form attitudes and develop health-enhancing lifestyles that will protect their health during childhood and into adulthood.

**Barrier #7: School drop-out**

Although Missouri's drop-out rate is in the vicinity of 25%, there is wide variation across the state, ranging from a low of less than 5% to a high of greater than 50%. Some of the lowest drop-out rates are found in rural north Missouri counties. Rates in southeast rural Missouri are among the highest. The highest rates are found in counties that have had substantial employment and population growth and/or have a high percentage of low-



income students. It becomes more difficult to identify the health-related needs of youth who drop out of school. Rural communities, because of limited services and staff, may fail in their attempts to provide needed services. As a result, many rural youth fall between the cracks and go without the basic care.

#### **Barrier #8: Lack of youth commitment to and ownership in the community**

Youth living in rural Missouri communities often lack opportunities to engage in and experience community service. Rarely are they involved in community decision-making about programs which directly affect them. When such opportunities do not exist, youth do not develop emotional ties to and a sense of ownership with their communities. While this barrier also exists for youth living in urban areas, failure to develop the leadership skills of rural youth can have a more direct and negative impact on the well-being and survival of the community.

#### **Barrier #9: Lack of positive leisure time activities in rural Missouri**

Risk-taking is normal adolescent behavior. When opportunities for positive risk-taking afforded by individual or team sports, drama groups, or club activities do not exist, youth will engage in negative risk-taking behaviors which can result in substance use, sexual activity, and reckless driving.

#### **Barrier #10: Lack of a coordinated data connection and documentation of results**

With increasing frequency, agencies are being asked to be accountable and to measure the impact of their efforts. While progress has been made, particularly in the area of reporting injuries, improving the health status of our youth and improving agency accountability cannot be accomplished without a more effective and "user-friendly" data collection system. In terms of the health-related concerns of youth, this means addressing issues like the following:

Our hesitancy to gather and report personal and sensitive health-related data, i.e., sexual practices of youth, substance use, youths' perception of quality of life, etc.

The lack of a consistent strategy for gathering appropriate health-related data on Missouri youth. The system must look not only at the cause of death, but at disability, hospitalization, root cause of injury/illness, and pay closer attention to geographic (rural/urban) differences.

The need to systematically use data as a tool in designing and implementing effective prevention programs for youth and their families.

#### **Recommendations**

Measures taken to improve or maintain the health of youth also have a major impact on our society, contributing to the containment of health care costs and to reducing the loss of human resources due to disabling and chronic conditions which have their roots in childhood. If Missouri is to succeed in protecting the health of our youth, there must be a major commitment from families, communities, health care providers, employers, and government. With this in mind, the Youth Health Task Force is presenting the following recommendations and action steps. Members of the task force believe that all three recommendations must be addressed simultaneously. The action steps suggest some priority measures to be taken within each recommendation.

**Improve access to health and mental health care for youth and their families.**

1. Remove barriers to nurse practitioners providing care in health programs serving youth and their families.
2. Provide adequate funding for state and local agencies mandated to provide health and mental health services for youth.
3. Eliminate financial and transportation barriers to health care.
4. Implement a statewide medical claims processing system involving the use of a standardized form with electronic transmission in order to simplify reporting and speed reimbursement.
5. Provide adequate and timely reimbursement for services in order to increase and maintain the number of health care providers participating in Medicare/Medicaid programs.

**Increase supportive services to parents and other caregivers in order to improve their ability to meet the health-related needs of their children.**

1. Support and adequately fund comprehensive school health education programs including school health instruction, school-linked health services (including an adequate number of school counseling and mental health services, in order to improve the health of youth and reduce school drop-out rates. Youth, parents and caregivers should be actively involved in the decision-making process for service design, delivery, and evaluation. A strategy for partial funding of these efforts may be the Medicaid Healthy Children and Youth Program (EPSDT).
2. Provide support and adequate funding for the development of a system of holistic health services at the community level which includes health promotion, prevention and education. Such services should be age-appropriate, culturally sensitive, encourage male and female participation and actively involve youth, parents, and other community members in program decision-making, planning, and implementation.
3. Provide resources needed to conduct a statewide public information campaign targeting youth health issues.
4. Support and fund programs and projects designed to inform parents and youth of existing health-related services available to them in their communities.

**Strengthen the community's capacity to meet the health needs of its youth.**

1. Promote and facilitate collaboration between existing community coalitions, groups, committees, and boards that are currently assessing youth needs, community services and programs and existing service gaps.
2. Support joint action planning and fund programs that demonstrate collaboration and coordination in the delivery of services to youth and their families and that actively involve youth and parents in program decision-making.
3. Support and fund drug-free and violence-free zones around schools and in neighborhoods.
4. Support and fund the development of model interdisciplinary community-based health-care delivery programs for youth. These pilot projects should encourage state and local networking and collaboration in the delivery of needed services.
5. Support and fund inter-agency collaboration and expansion of a multi-agency data system which allows for adequate tracking and surveillance not only of mortality data but morbidity indicators such as hospitalization, disability and risk behaviors. The system should also allow for tracking of location and root cause of injury or illness.

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